

## Chemical Safety Data Sheet MSDS / SDS

**ANILINE (13C6)**

Revision Date:2023-12-07 Revision Number:1

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : ANILINE (13C6)  
CBnumber : CB9322691  
CAS : 100849-37-4  
Synonyms : ANILINE (13C6)

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 400-158-6606

**SECTION 2: Hazards identification****GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word

Danger

**Precautionary statements**

P284 Wear respiratory protection.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P273 Avoid release to the environment.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P201 Obtain special instructions before use.

**Hazard statements**

H318 Causes serious eye damage  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H341 Suspected of causing genetic defects  
H351 Suspected of causing cancer  
H372 Causes damage to organs through prolonged or repeated exposure

H410 Very toxic to aquatic life with long lasting effects

H317 May cause an allergic skin reaction

---

## SECTION 3: Composition/information on ingredients

### Substance

Product name : ANILINE (13C6)  
Synonyms : ANILINE (13C6)  
CAS : 100849-37-4  
MF : C6H7N  
MW : 99.18

---

## SECTION 4: First aid measures

### Description of first aid measures

#### General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor

#### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### Indication of any immediate medical attention and special treatment needed

No data available

---

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

## Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) Combustible.

Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

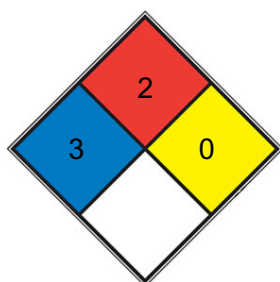
## Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

## Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## NFPA 704



HEALTH 3 Short exposure could cause serious temporary or moderate residual injury (e.g. [liquid hydrogen](#), [sulfuric acid](#), [calcium hypochlorite](#), hexafluorosilicic acid)

FIRE 2 Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur and multiple finely divided suspended solids that do not require heating before ignition can occur. Flash point between 37.8 and 93.3 °C (100 and 200 °F). (e.g. diesel fuel, [sulfur](#))

REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, [N<sub>2</sub>](#))

SPEC.

HAZ.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### Environmental precautions

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-

absorbent material (e.g. Chemizorb?). Dispose of properly. Clean up affected area.

### **Reference to other sections**

For disposal see section 13.

---

## **SECTION 7: Handling and storage**

### **Precautions for safe handling**

#### **Advice on safe handling**

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

#### **Advice on protection against fire and explosion**

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### **Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

#### **Conditions for safe storage, including any incompatibilities**

#### **Storage conditions**

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

#### **Storage stability**

Recommended storage temperature 2 - 8 °C

#### **Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

## **SECTION 8: Exposure controls/personal protection**

### **control parameter**

#### **Hazard composition and occupational exposure limits**

Does not contain substances with occupational exposure limits.

#### **Exposure controls**

#### **Personal protective equipment**

##### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

##### **Skin protection**

required

#### Body Protection

protective clothing

#### Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

#### Control of environmental exposure

Do not let product enter drains.

---

## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

Appearance	liquid
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	Melting point/range: -6 °C - lit.
Initial boiling point and boiling range	184 °C - lit.
Flash point	70 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1,087 g/mL at 25 °C 1,087 g/cm <sup>3</sup> at 25 °C No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	No data available
Oxidizing properties	No data available

### Other safety information

No data available

## SECTION 10: Stability and reactivity

### Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) . May discolor on exposure to light.

### Possibility of hazardous reactions

No data available

### Conditions to avoid

Strong heating.

### Incompatible materials

No data available

### Hazardous decomposition products

In the event of fire: see section 5

---

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - 250 mg/kg Remarks: (RTECS)

The value is given in analogy to the following substances: Aniline LC50 Inhalation - Rat - 4 h - 3,3 mg/l

Remarks: (Lit.)

(Regulation (EC) No 1272/2008, Annex VI)

The value is given in analogy to the following substances: Aniline LD50 Dermal - Rabbit - 840 mg/kg

Remarks: (Lit.)

The value is given in analogy to the following substances: Aniline

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation Remarks: (Lit.)

The value is given in analogy to the following substances: Aniline

#### Serious eye damage/eye irritation

Causes serious eye damage. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) The value is given in analogy to the following substances:

#### Respiratory or skin sensitization

May cause allergic skin reaction. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) The value is given in analogy to the following substances:

#### Germ cell mutagenicity

Suspected of causing genetic defects.

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471

Result: negative

Remarks: The value is given in analogy to the following substances: Aniline Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476

Result: positive

Remarks: The value is given in analogy to the following substances: Aniline Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473

Result: positive

Remarks: The value is given in analogy to the following substances: Aniline Test Type: unscheduled DNA synthesis assay

Test system: rat hepatocytes

Metabolic activation: without metabolic activation Result: negative

Remarks: (ECHA)

The value is given in analogy to the following substances: Aniline Test Type: Micronucleus test

Species: Rat

Cell type: Bone marrow Application Route: Oral

Method: OECD Test Guideline 474 Result: positive

Remarks: The value is given in analogy to the following substances: Aniline

Test Type: Micronucleus test Species: Mouse

Cell type: Bone marrow Application Route: Intraperitoneal Method: OECD Test Guideline 475 Result: positive

Remarks: The value is given in analogy to the following substances: Aniline

Test Type: Chromosome aberration test Species: Rat

Cell type: Bone marrow Application Route: Oral

Method: OECD Test Guideline 475 Result: positive

Remarks: The value is given in analogy to the following substances: Aniline

Test Type: dominant lethal test Species: Rat

Application Route: Intraperitoneal Method: OECD Test Guideline 478 Result: negative

Remarks: The value is given in analogy to the following substances: Aniline

#### **Carcinogenicity**

No data available

#### **Reproductive toxicity**

No data available

#### **Specific target organ toxicity - single exposure**

No data available

#### **Specific target organ toxicity - repeated exposure**

Causes damage to organs through prolonged or repeated exposure. - Blood

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) The value is given in analogy to the following substances: Aniline

#### **Aspiration hazard**

No data available

---

## SECTION 12: Ecological information

### Toxicity

#### Toxicity to fish

flow-through test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 10,6 mg/l - 96,0 h

Remarks: (ECHA)

The value is given in analogy to the following substances: Aniline

#### Toxicity to daphnia and other aquatic invertebrates

semi-static test EC50 - *Daphnia magna* (Water flea) - 0,16 mg/l - 48 h

(US-EPA)

Remarks: The value is given in analogy to the following substances: Aniline

#### Toxicity to algae

static test ErC50 - *Chlorella pyrenoidosa* - 175 mg/l - 72 h (OECD Test Guideline 201)

Remarks: The value is given in analogy to the following substances: Aniline

#### Toxicity to bacteria

EC50 - activated sludge - 2.500 mg/l - 10 min

Remarks: (Lit.)

The value is given in analogy to the following substances: Aniline

### Persistence and degradability

Biodegradability aerobic - Exposure time 30 d

Result: ca.90 % - Readily biodegradable.

(OECD Test Guideline 301D)

Remarks: The value is given in analogy to the following substances: Aniline

### Bioaccumulative potential

Bioaccumulation *Danio rerio* (zebra fish) - < 0,1 mg/l(Aniline-13C6)

Bioconcentration factor (BCF): 2,6

Remarks: The value is given in analogy to the following substances: Aniline

### Mobility in soil

No data available

### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and  
Chemical Book



very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **Other adverse effects**

No data available

---

## SECTION 13: Disposal considerations

#### **Waste treatment methods**

#### **Product**

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

---

## SECTION 14: Transport information

#### **UN number**

ADR/RID: 1547 IMDG: 1547

#### **UN proper shipping name**

ADR/RID: ANILINE IMDG: ANILINE IATA: Aniline

#### **Transport hazard class(es)**

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

#### **Packaging group**

ADR/RID: II IMDG: II IATA: II

#### **Environmental hazards**

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

#### **Special precautions for user**

No data available

---

## SECTION 15: Regulatory information

#### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

##### **Regulations on the Safety Management of Hazardous Chemicals**

China Catalog of Hazardous chemicals 2015:Not Listed. website: <https://www.mem.gov.cn/>

##### **Measures for Environmental Management of New Chemical Substances**

Korea Existing Chemicals List (KECL):Not Listed. website: <http://ncis.nier.go.kr>

New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: <https://www.epa.govt.nz/>

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: <https://emb.gov.ph/>

European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: <https://echa.europa.eu/>

Vietnam National Chemical Inventory:Not Listed. website: <https://chemicaldata.gov.vn/>

United States Toxic Substances Control Act (TSCA) Inventory:Not Listed. website: <https://www.epa.gov/>

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: <https://www.mee.gov.cn/>

EC Inventory:Not Listed.

---

## SECTION 16: Other information

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

### References

【1】 CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

【2】 ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

【3】 ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

【4】 eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

[http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)

【5】 ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>

【6】 Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>

【7】 HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

【8】 IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>

【9】 IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>

【10】 Sigma-Aldrich, website: <https://www.sigmaaldrich.com/>

#### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.